

**DESCRIPTION**

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Patched 1/PTCH in direct ELISAs
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 413218
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse Patched 1/PTCH Glu108-Asp422 Accession # Q61115
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

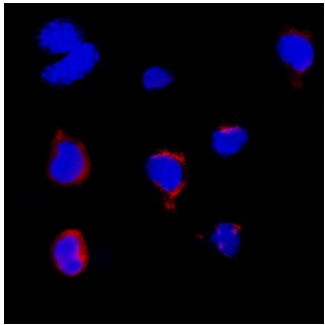
**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunocytochemistry</b>	3-25 µg/mL	fixed Neuro2A cells
<b>Immunohistochemistry</b>	3-25 µg/mL	Immersion fixed paraffin-embedded sections of mouse kidney

**DATA**

**Immunocytochemistry/ Immunofluorescence**



**Detection of Patched 1/PTCH in Neuro2a.** Patched 1/PTCH was detected in fixed Neuro2A cells using Rat Anti-Mouse Patched 1/PTCH Monoclonal Antibody (Catalog # MAB11487) at 8 µg/ml for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to the membrane. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

**Immunohistochemistry**



**Detection of Patched 1/PTCH in Mouse Kidney.** Patched 1/PTCH was detected in immersion fixed paraffin-embedded sections of mouse kidney using Rat Anti-Mouse Patched 1/PTCH Monoclonal Antibody (Catalog # MAB11487) at 5 µg/ml for 1 hour at room temperature followed by incubation with the Anti-Rat IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC005). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the membrane of cells in convoluted tubules. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
<b>Shipping</b>	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

Patched is a 170-175 kDa member of the patched family of proteins. It is found on multiple cells types and forms a constitutive, inactivating complex with Smoothened. Upon SHH binding to Patched, Smoothened is released and initiates downstream signaling. Mouse Patched is a 12 transmembrane, 1434 amino acid (aa) glycoprotein that contains two terminal cytoplasmic domains. Only one mRNA species for Patched has been reported in mice. However, it would appear likely that two or more splice forms exist, with variation occurring over the first 150 aa of the N-terminus. Over aa 108-422, mouse Patched shares 97% and 99% aa sequence identity with human and rat Patched, respectively.